Pertussis

What is pertussis?

Pertussis, or whooping cough, is a highly contagious disease involving the respiratory tract. It is caused by a bacterium that is found in the mouth, nose and throat of an infected person. Approximately 100 to 500 cases are typically reported annually in Washington. The 826 cases in 1996 gave the highest incidence recently.

Who gets pertussis?

Pertussis can occur at any age. Severe illness is more common in young children who have not been immunized. Older immunized children or adults with pertussis have milder symptoms. The diagnosis of pertussis should be considered for older children or adults with persistent coughs to ensure they do not pass the infection on to young children.

How is pertussis spread?

Pertussis is primarily spread when infected people cough or sneeze, expelling droplets that contain *Bordetella pertussis* bacteria. Older siblings or adults who may be harboring the bacteria in their nose and throat can infect an infant.

What are the symptoms of pertussis?

Pertussis begins as a mild upper respiratory infection. Initially, symptoms resemble those of a common cold, including sneezing, runny nose, low-grade fever and a mild cough. Within two weeks, the cough becomes more severe and is characterized by episodes of numerous rapid coughs followed by a crowing or high pitched whoop. A thick, clear mucus may be discharged. These episodes may recur for one to two months, and are more frequent at night.

Young children who have not been immunized have the most severe symptoms. Infants less than six months of age, adolescents and adults often don't have the characteristic whoop. Therefore, a person with a cough that lasts more than a week without improvement should see a health care provider to ensure the cough is not pertussis.

How soon after infection do symptoms appear?

The incubation period is usually five to ten days but may be as long as 21 days.

When and for how long is a person able to spread pertussis?

A person can transmit pertussis from the beginning of cold like symptoms to three weeks after the onset of coughing episodes. The period of communicability is reduced to between five and seven days when antibiotic therapy is begun.

Pertussis

Does past infection with pertussis make a person immune?

One attack usually provides immunity for many years, but immunity is usually not life-long.

What are the complications associated with pertussis?

Complications of pertussis may include pneumonia, middle ear infection, loss of appetite, dehydration, seizures, encephalopathy (disorders of the brain), apneic episodes (brief cessation of breathing) and death. Eighty percent of deaths from pertussis occur in children under age one year.

What are the vaccine for pertussis?

The vaccines for pertussis are given in combination with diphtheria and tetanus. The Advisory Committee on Immunization Practices (ACIP) recommends that five doses of DTaP (diphtheria, tetanus, and acellular pertussis) vaccine be given at two, four, six, 12-19 months of age, and between four and seven years of age or by school entry**.** In 2005, the Food and Drug Administration (FDA) licensed two new Tdap (tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis) vaccines for adolescents and adults. Previously no pertussis vaccine was available for anyone age 7 or older. If given routinely, Tdap will reduce pertussis-related morbidity in adolescents and decrease the spread of pertussis to infants.

One vaccine is licensed for use in 10-18 year olds. The other vaccine is licensed for people 11-64 years of age. The ACIP recommends that adolescents 11-18 years of age receive one dose of Tdap in place of a single Td (Tetanus and Diphtheria) booster dose. Adolescents should only be given Tdap if they have completed the five dose childhood DTaP series and have not yet received Td or Tdap. Adults 19-64 years of age should receive a single dose of Tdap to replace their next Td booster dose if they received their most recent Td more than 10 years earlier. The vaccine is also recommended for adults who have close contact with an infant who is less than one year old.

More information on Tdap is available from the Centers for Disease Control and Prevention at: http://www.cdc.gov/nip/vaccine/tdap/default.htm.

What can be done to prevent the spread of pertussis?

The single most effective control measure is maintaining the highest possible level of immunization in the community. Anyone who comes into close contact with a person who has pertussis should receive antibiotics to prevent spread of the disease. Treatment of cases with certain antibiotics such as erythromycin can shorten the contagious period. People who have or may have pertussis should stay away from young children and infants until properly treated.

For more information call your local health department or Communicable Disease Epidemiology (206) 418-5500 or toll-free 877-539-4344.